ETL 1110-3-490

DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS Washington, DC 20314- 1000

Technical Letter No. 1110-3-490

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Engineering and Design DESIGN OF CHEMICAL AGENT COLLECTIVE PROTECTION SHELTERS FOR NEW AND EXISTING FACILITIES

- 1. <u>Purpose</u>. This Engineer Technical Letter (ETL) provides information and guidance for the design of collective protection (CP) systems for new and existing facilities. Collective protection provides a toxic-free area (TFA) where personnel can function without individual protective equipment such as a mask and protective garments.
- 2. <u>Applicability</u>. This ETL applies to all HQUSACE elements and USACE commands having military construction responsibility.
- 3. <u>References</u> Appendix A contains a list of referenced and related publications
- 4. <u>Distribution</u>. Approved for public release; distribution is unlimited.
- 5. <u>Background</u>. A chemical threat to personnel can come from terrorist or wartime attacks Protection of personnel during these events can be achieved by evacuation from the affected area or by the use of shelters. When evacuation is logistically impossible, passive shelters that use only sealing measures will provide protection for a short period. For long durations, a preplaced collective protection overpressure system is required.
- 6. <u>Action</u>. Pending publication of permanent guidance, the enclosed information will be used to assist HQUSACE, major subordinate commands, district offices, and FOA in the management and design of collective protection systems.
- 7. <u>Implementation</u>. This letter will have routine application for all future military projects as defined in paragraph 8c, ER 1110-345- 100.

FOR THE COMMANDER:

3 Appendices

App A - References

App B - Collective Protection Requirements

for Existing and New Facilities

App C - Two-Stage Airlock Design and

Processing Procedures

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